Amendment to the Abstract:

Please replace the Abstract with the following abstract:

The present invention relates to a method for extracting individual band components from heavily overlapping bands. The method is based on first derivative-second derivative plots of an experimental spectrum and consists of two stages. The first stage is concerned with the geometric approach that estimates a set of values for the parameters of a component band in the overlapping bands, and repeats band decomposition of the remaining bands in the same manner after removing the estimated band from the overlapping bands. The second stage is to minimize the difference between the profiles of the estimated band and its complementary band by a least-squares optimization, and then to determine the optimum values of the band parameters.

~~As for the specific analyzed object, the spectral profile is prepared. The spectral profile is differentiated and the two-dimensional derivative plot wherein at least one axis denotes the differentiated value is prepared, and at least one component band is estimated based on the characteristic information including the local minimum and the local maximum in the said two-dimensional derivative plot.~~

~~The component bands are estimated which construct spectral profile of the analyzed object by iterating the estimation of other component bands in the same procedure and by estimating component bands in order as for the profile with estimated component bands removed from the original spectral profile or the two-dimensional derivative plot.~~

~~Further, after estimating the component bands, the band parameter values are so improved as to coincide the specific estimated component bands with complementary estimated component bands with all the component bands removed except for the specific component bands estimated from the original spectral data. The total sum of the distances of the isowavenumber lines and the symmetry of the two-dimensional derivative plot are employed as criteria of the coincidence.~~